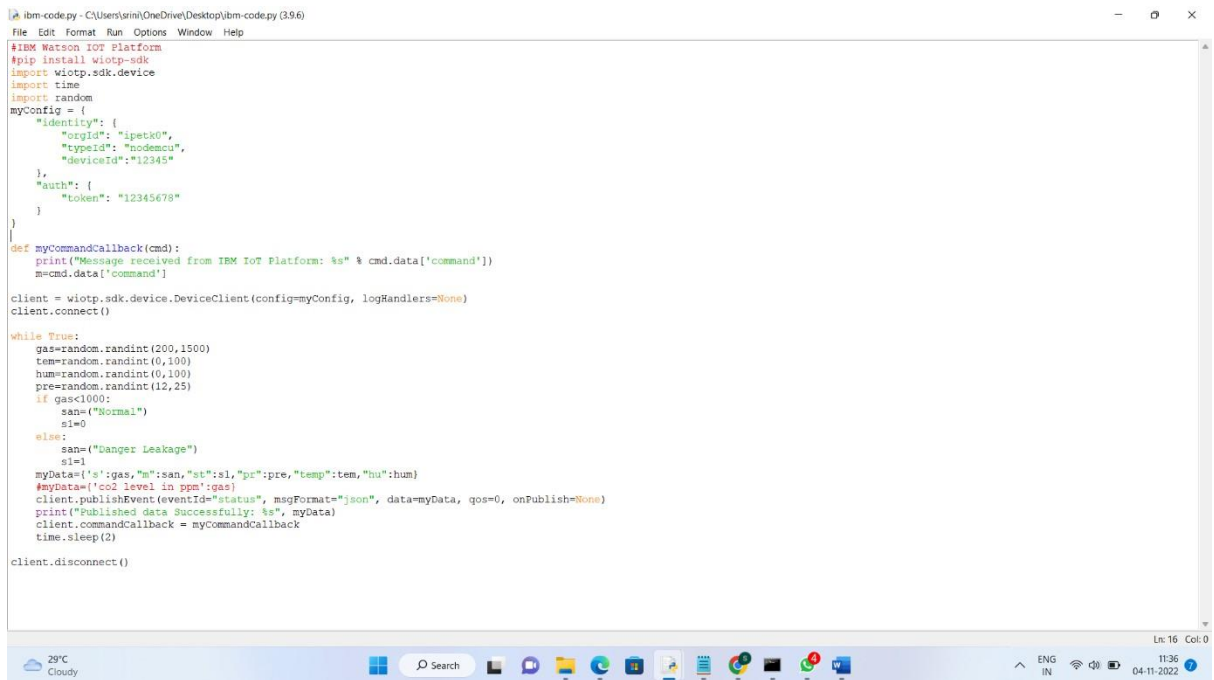


SPRINT – 4

DATE	19/11/2022
TEAM ID	PNT2022TMID22887
PROJECT NAME	GAS LEAKAGE MONITORING & ALERTING SYSTEM FOR INDUSTRIES
MAXIMUM MARKS	2

PYTHON SCRIPT



```
ibm-code.py - C:\Users\srin\OneDrive\Desktop\ibm-code.py (3.9.6)
File Edit Format Run Options Window Help

#IBM Watson IoT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "ipetk0",
        "typeId": "nodemcu",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    gas=random.randint(200,1500)
    tem=random.randint(0,100)
    hum=random.randint(0,100)
    pre=random.randint(12,25)
    if gas<1000:
        san=("Normal")
        sl=0
    else:
        san=("Danger Leakage")
        sl=1
    myData={'s':gas,"m":san,"st":sl,"pr":pre,"temp":tem,"hu":hum}
    #myData={'co2 level in ppm':gas}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)

client.disconnect()
```

#IBM Watson IoT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time import random

myConfig = {

 "identity": {

 "orgId": "ipetk0",

 "typeId": "nodemcu",

 "deviceId": "12345"

 },

```

    "auth": {
        "token": "12345678"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
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client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None) client.connect()

while True:
    gas=random.randint(200,1500)
    tem=random.randint(0,100)
    hum=random.randint(0,100)
    pre=random.randint(12,25)    if
    gas<1000:
        san=("Normal")
    s1=0    else:
        san=("Danger Leakage")
    s1=1

    myData={'s':gas,"m":san,"st":s1,"pr":pre,"temp":tem,"hu":hum}
    #myData={'co2 level in ppm':gas}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)    client.commandCallback =
    myCommandCallback    time.sleep(2)

client.disconnect()

```

SCRIPT OUTPUT

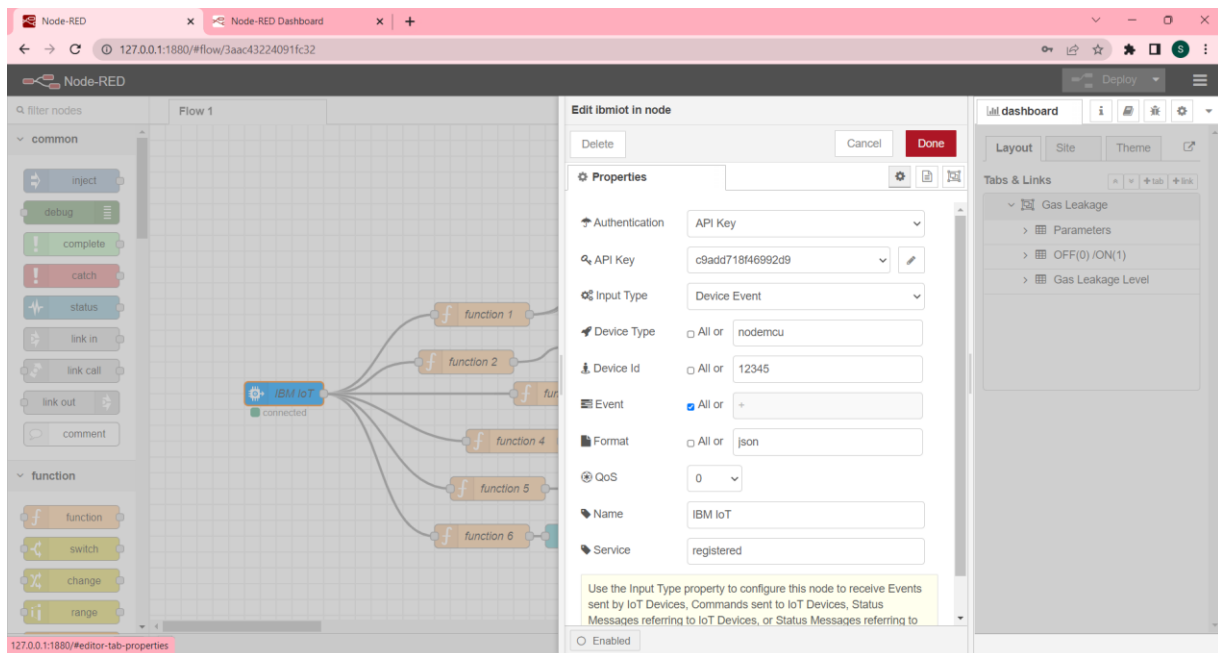
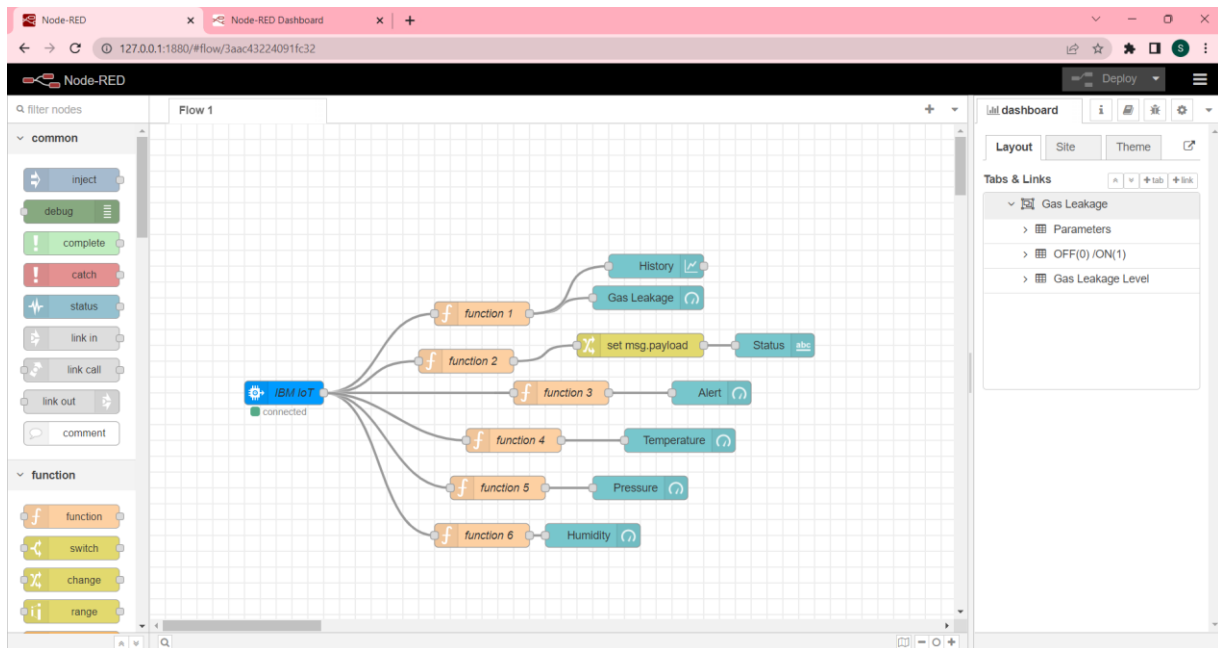
```

IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Published data Successfully: %s ('s': 1176, 'm': 'Danger Leakage', 'st': 1, 'pr': 17, 'temp': 94, 'hu': 15)
Published data Successfully: %s ('s': 1070, 'm': 'Danger Leakage', 'st': 1, 'pr': 15, 'temp': 44, 'hu': 5)
Published data Successfully: %s ('s': 1315, 'm': 'Danger Leakage', 'st': 1, 'pr': 20, 'temp': 72, 'hu': 40)
Published data Successfully: %s ('s': 448, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 33, 'hu': 16)
Published data Successfully: %s ('s': 1187, 'm': 'Danger Leakage', 'st': 1, 'pr': 17, 'temp': 34, 'hu': 72)
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Published data Successfully: %s ('s': 1412, 'm': 'Danger Leakage', 'st': 1, 'pr': 16, 'temp': 2, 'hu': 67)
Published data Successfully: %s ('s': 328, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 66, 'hu': 74)
Published data Successfully: %s ('s': 1434, 'm': 'Danger Leakage', 'st': 1, 'pr': 16, 'temp': 10, 'hu': 3)
Published data Successfully: %s ('s': 1085, 'm': 'Danger Leakage', 'st': 1, 'pr': 18, 'temp': 56, 'hu': 37)
Published data Successfully: %s ('s': 558, 'm': 'Normal', 'st': 0, 'pr': 17, 'temp': 74, 'hu': 78)
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Published data Successfully: %s ('s': 779, 'm': 'Normal', 'st': 0, 'pr': 22, 'temp': 52, 'hu': 100)
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Published data Successfully: %s ('s': 911, 'm': 'Normal', 'st': 0, 'pr': 22, 'temp': 17, 'hu': 62)
Published data Successfully: %s ('s': 649, 'm': 'Normal', 'st': 0, 'pr': 15, 'temp': 56, 'hu': 86)
Published data Successfully: %s ('s': 1190, 'm': 'Danger Leakage', 'st': 1, 'pr': 24, 'temp': 14, 'hu': 84)
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Published data Successfully: %s ('s': 296, 'm': 'Normal', 'st': 0, 'pr': 15, 'temp': 41, 'hu': 16)
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Published data Successfully: %s ('s': 445, 'm': 'Normal', 'st': 0, 'pr': 13, 'temp': 91, 'hu': 2)
Published data Successfully: %s ('s': 1199, 'm': 'Danger Leakage', 'st': 1, 'pr': 18, 'temp': 79, 'hu': 88)
Published data Successfully: %s ('s': 1037, 'm': 'Danger Leakage', 'st': 1, 'pr': 12, 'temp': 6, 'hu': 18)
Published data Successfully: %s ('s': 438, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 99, 'hu': 93)
Published data Successfully: %s ('s': 861, 'm': 'Normal', 'st': 0, 'pr': 25, 'temp': 91, 'hu': 99)
Published data Successfully: %s ('s': 226, 'm': 'Normal', 'st': 0, 'pr': 25, 'temp': 74, 'hu': 36)
Published data Successfully: %s ('s': 810, 'm': 'Normal', 'st': 0, 'pr': 14, 'temp': 50, 'hu': 50)
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Published data Successfully: %s ('s': 1441, 'm': 'Danger Leakage', 'st': 1, 'pr': 12, 'temp': 99, 'hu': 3)
Ln 5 Col 0
29°C Cloudy
Search
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ACCOUNT IN IBM WATSON



NODE RED



WEB APPLICATION USING NODE RED

